

## **REMARKS**

### **I. Introduction**

In response to pending Office Action, Applicants have amended claims 1, 3, 4, 12, 13 and 15-17 so as to address the objections thereto and to further clarify the subject matter of the present invention. No new matter has been added.

For the reasons set forth below, Applicants respectfully submit that all pending claims are in condition for allowance.

### **II. Rejection Of The Claims Under 35 U.S.C. § 102**

Claims 1, 3, 4, 13 and 16-20 were rejected under 35 U.S.C. § 102(e) as being anticipated USP No. 6,728,026 to Lee. Applicants respectfully submit that the pending claims, as amended, are not anticipated by Lee for at least the following reasons.

As recited by amended claim 1, the invention relates to an apparatus for performing dispersion compensation which includes in-part a dynamic power controller for maintaining the total power of a WDM signal below a prescribed level prior to receipt of the WDM optical signal by a dispersion compensating element. During operation, and as recited by amended claim 1, the dynamic power controller determines the total number of channels and the total power in the WDM optical signal. As explained in paragraphs [0025] of corresponding USP Pub. No. 2005/0111847, by utilizing the optical tunable filter and sweeping the tuner across its bandwidth, it is possible for the controller to determine the total number of channels in the WDM signal. By utilizing the information regarding the total number of channels and the total power level of the WDM signal, the dynamic power controller can determine the maximum power level of the WDM signal that should not be exceeded to avoid nonlinear penalties.

Turning to the cited prior art reference, at a minimum, Lee does not disclose a dynamic power controller that determines the total number of channels and the total power in the WDM optical signal. It appears based on the disclosure of Lee set forth in col. 2, lines 1-55 that the controller 112 controls the variable optical attenuator 108 so as to adjust the gain of the entire amplifier based on the power level coupled back to the controller 112 via EDFA2 amplifier 104. Nowhere does it appear that the controller 112 determines the total number of channels and the total power in the WDM optical signal as recited by amended claim 1. Thus, at a minimum, Lee fails to disclose or suggest this limitation of claim 1. It is further noted that all of the pending independent claims have also been amended to recite the foregoing element added to claim 1.

Accordingly, as each and every limitation must be disclosed by a single prior art reference in order to establish a rejection under 35 U.S.C. § 102, and Lee fails to do so for at least the foregoing reasons, it is respectfully submitted that claim 1 and the other independent claims, as well as the pending dependent claims, are patentable over Lee.

### **III. Summary**

Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 502117 and please credit any excess fees to such deposit account.

To the extent an extension of time is needed for consideration of this response, Applicant hereby request such extension and, the Commissioner is hereby authorized to charge deposit account number 502117 for any fees associated therewith.

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Respectfully submitted,

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